DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY CONTROL CONSTRUCTION PERMIT

Permit No. 241CP03 **Proposed – December 23, 2004**
Replaces Permit No. 241CP02

The Department of Environmental Conservation (department), under the authority of AS 46.14 and 18 AAC 50, issues Air Quality Control Construction Permit No. 231CP03 to:

Owner and Operator:	**Alyeska Seafoods, Inc.** P.O. Box 350 Unalaska, Alaska 99685
Permittee:	**Same as Owner and Operator**
Stationary Source:	**Unalaska Seafood Processing Facility**
Location:	Latitude 53˚ 52′ 43′′ North; Longitude 166˚ 32′ 32′′ West UTM Zone 3 – 398,820 m East; 5,970,977 m North
Physical Address:	551 West Broadway P.O. Box 530 Unalaska, Alaska 99685
Permit Contact:	Greg Peters (907) 581-7543

This permit revises equations governing the Cumulative Equivalent Total (CET) fuel cap limits of the emission units in accordance with Alyeska Seafood Inc.'s submittal, and the terms and conditions of this permit. As required by AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this construction permit.

This permit satisfies the obligation of the owner and operator to obtain a construction permit as set out in AS 46.14.130(a).

The construction permit classification of Alyeska Seafoods Inc. 18 AAC 50.300(b)(1)(A). The modification is classified under 18 AAC 50.300(h)(2). The owner requested limit revision is classified under 18 AAC 50.305(a)(4).

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John F. Kuterbach
Manager, Air Permits Program

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PERMIT TERMS AND CONDITIONS

I. Visible Emission Standard. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from Unit IDs 1 through 11 shown in Exhibit A to reduce visibility through the exhaust effluent by greater than 20 percent averaged over any six minutes.

II. NO_X PSD Avoidance Limits. The Permittee shall not allow the engines (Unit IDs 1 - 4, 5, and 6, combined, shown in Exhibit A) to emit more than 273 tons of NOX per 12 consecutive months, and shall not allow the boilers and dryer (Unit IDs 7, 8, 9, 10, and 11 combined, shown in Exhibit A) to emit more than 19.2 tons of NOX per 12 consecutive months.

A. Track fuel consumption for each of Units ID 1 through 11, shown in Exhibit A, using either condition II.A.1 or II.A.2.

1. Maintain and operate in good working order a continuous system for recording and monitoring fuel consumed in each unit. Calculate and record the total fuel consumed in each of Unit IDs 1 through 11 each month.

2. Record hours of operation daily, and calculate and record fuel consumed in each of Units ID 1 through 11 each month using hours of operation and maximum fuel consumption rates shown in Table 1.

Table 1 - Maximum Fuel Consumption Rates

UNIT ID	MAXIMUM FUEL CONSUMPTION RATE IN GAL/HR
1-4	56.5 each
5	98.1
6	125.4
7	106.9
8	71
9	91.6
10	50.9
11	175

B. For the engines:

1. Do not exceed a CET fuel limit of 1,440,700 gallons per 12 consecutive months. By the 15th of each month calculate the CET for the engines using Equation 1.

Equation 1 $$CET = (0.582)G_{1-4} + (1.755)G_5 + (1.873)G_6$$

where:
$G_{1\text{-}4}$ = Preceding 12 month rolling total fuel burned in Unit IDs 1 - 4
G_5 = Preceding 12 month rolling total fuel burned in Unit ID 5
G_6 = Preceding 12 month rolling total fuel burned in Unit ID 6

2. By the 15th of each month, calculate and record 12 month rolling total NO_X emissions for the previous 12 months using Equation 2.

Equation 2 $$Emissions\,(tpy) = \left[\frac{(0.200)G_{1-4} + (0.665)G_5 + (0.710)G_6}{2000}\right]$$

where:
$G_{1\text{-}4}$ = Preceding 12 month rolling total fuel burned in Unit IDs 1 - 4
G_5 = Preceding 12 month rolling total fuel burned in Unit ID 5
G_6 = Preceding 12 month rolling total fuel burned in Unit ID 6

3. Report as a permit deviation any time the CET calculated in condition II.B.1 exceeds the CET fuel limit in condition II.B.1 and any time the total emissions calculated in condition II.B.2 exceeds the limit for the engines in condition II.

4. Include the records required under conditions II.B.1 and II.B.2 with the Facility Operating Report required by condition 40 of Operating Permit No. 241TVP01, Revision 1.

C. For the boilers and fishmeal dryer,

1. Do not exceed a CET fuel limit of 1,637,228 gallons per 12 consecutive months. By the 15th of each month calculate the CET for the boilers and fishmeal dryer using Equation 3:

Equation 3 $$CET = (1.297)G_7 + (0.597)G_8 + (1.705)G_9 + (1.151)G_{10} + (0981)G_{11}$$

where:
G_7 = Preceding 12 month rolling total fuel burned in Unit ID 7, gallons
G_8 = Preceding 12 month rolling total fuel burned in Unit ID 8, gallons
G_9 = Preceding 12 month rolling total fuel burned in Unit ID 9, gallons
G_{10} = Preceding 12 month rolling total fuel burned in Unit ID 10, gallons
G_{11} = Preceding 12 month rolling total fuel burned in Unit ID 11, gallons

2. By the 15th of each month, calculate and record 12 month rolling total NO_X emissions for the previous 12 months using Equation 4.

Equation 4 $Emissions\,(tpy) = \left[\frac{(0.030)G_7 + (0.014)G_8 + (0.040)G_9 + (0.027)G_{10} + (0.023)G_{11}}{2000}\right]$

where:
G_7 = Preceding 12 month rolling total fuel burned in Unit ID 7, gallons
G_8 = Preceding 12 month rolling total fuel burned in Unit ID 8, gallons
G_9 = Preceding 12 month rolling total fuel burned in Unit ID 9, gallons
G_{10} = Preceding 12 month rolling total fuel burned in Unit ID 10, gallons
G_{11} = Preceding 12 month rolling total fuel burned in Unit ID 11, gallons

3. Report as a permit deviation any time the CET calculated in condition II.C.1 exceeds the CET fuel limit in condition II.C.1 and any time the total emissions calculated in condition II.C.2 exceed the limit for the engines in condition II.

4. Include the records required under conditions II.C.1 and II.C.2 with the Operating Report required in Operating Permit No. 241TVP01, Revision 2.

III. Limit to Protect SO_2 Ambient Air Quality Standard and Increment. Do not burn more than 3,077,928 gallons during any 12 consecutive months in Unit IDs 1 through 11.

A. Track fuel consumption as required under condition II.A.

B. Report as a permit deviation any time the 12-month total exceeds the limit in condition III.

C. Include the records required under condition III.A with the Facility Operating Report required in the Operating Permit No. 241TVP01, Revision 2.

IV. Limit to Protect NO_2 Ambient Air Quality Standard and Increment. The Permittee shall not allow the facility to cause a violation of the state ambient air quality standard and increment for NO_2.

A. Limit the total amount of all fuels burned in Unit IDs 1 through 6, combined, to less than 1,440,700 gallons per 12 consecutive months.

1. By the 15th of each month, calculate and record the 12-month rolling total fuel burned in Unit IDs 1 through 6 for the previous 12 months, in gallons.

2. Report as a permit deviation any time the 12-month total exceeds the limit in condition IV.A.

3. Include the records required under condition IV.A.1 with the Facility Operating Report required in Operating Permit No. 241TVP01, Revision 2.

B. Limit the total amount of all fuels burned in Unit IDs 7 through 11, combined, to less than 1,637,228 gallons per 12 consecutive months.

1. By the 15th of each month, calculate and record the 12 month rolling total fuel

burned in Unit IDs 7 through 11 for the previous 12 months, in gallons.

2. Report as a permit deviation any time the 12-month total exceeds the limit in condition IV.B.

3. Include the records required under condition IV.B.1 with the Operating Report required in Operating Permit No. 241TVP01, Revision 2.

EXHIBIT A
EMISSION UNIT INVENTORY
241CP02

ID	Unit Name	Unit Description
1	Diesel Generator	Caterpillar Model D-398 500kW;installed pre 1986
2	Diesel Generator	Caterpillar Model D-398 500kW;installed pre 1986
3	Diesel Generator	Caterpillar Model D-398 500kW;installed pre 1986
4	Diesel Generator	Caterpillar Model D-398 500kW;installed pre 1986
5	Diesel Generator	Caterpillar Model D-3606 1500kW;installed 1987
6	Diesel Generator	Caterpillar Model D-3608 2000kW;installed 1990
7	Steam Boiler	York Shipley FA350 350 bhp; installed pre 1986
8	Steam Boiler	Seattle Boiler Works Model HPFWB 1650 Four Pass Wet Back Boiler with S.T. Johnson FT98 Low NO_X burner rated at 9.7 MMBtu/hr; installed 2000
9	Steam Boiler	Seattle Boiler Works Model HPT-1650 300 bhp;1990
10	Steam Boiler	Kewanee Model H3S-200-GO6 200 bhp;1990
11	Fish Meal Drier	Stord Int'l. Dyno Jet Hot Air Drier, Model SIDJ-4.5 with Ray Rotary Burner, Model BGE-700 24.1 MMBtu/hr; installed 1990
12	Diesel Oil Storage Tank	20,000 gallons; installed 1987
13	Two Fish Oil Storage Tanks	20,000 gallons, each; installed 1990

EXHIBIT B
PERMIT DOCUMENTATION

This exhibit is a continuation of Exhibit E of Permit 9625-AA006.

August 30, 2004	Application for permit modification, submitted by William Weisfield to ADEC.
October 11, 2000	Letter from Winn Brindle (Alyeska) to Compliance Technician, ADEC containing source stack diameters.
November 13, 2000	Source Test Data: Summary Report, Alyeska Seafood Processing Facility, Prepared by Alaska Source Testing LLC.
February 21, 2002	Application for permit modification, submitted by Greg Peters (Alyeska) to Jim Baumgartner (ADEC).
October 17, 2002	Comments on Preliminary Permit No. 241CP02 from Greg Peters (Alyeska) to Jim Baumgartner (ADEC).
October 25, 2002	Vendor Data for Cat 398, 3606, and 3608 engines faxed to Sally Ryan (ADEC) from Greg Peters (Alyeska).